



ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of
Invention

Waferless fiber fabry-perot filters

Application Number: 10/686934

Confirmation Number: 4564

First Named Applicant: Yufei Bao

Attorney Docket Number: 113-02

Search string: (6115122 or 6044189 or 5896193 or 5892582
or 5838437 or 5591965 or 5563973 or 5513913
or 5509093 or 5426297 or 5425039 or 5422970
or 5410404 or 5401956 or 5397891 or 5380995
or 5375181 or 5289552 or 5212746 or 5212745
or 4996419 or 4806012 or 5615224 or 5682237
or 5694503 or 5841920 or 5732169 or 4848499
or 4892388 or 4923273 or 5062684 or 5073004
or 5115441 or 5181213 or 5301201 or 5305336
or 5397739 or 5422470 or 5530715 or 5666373
or 5042898 or 5361130 or 5227857 or 6241397
or 6137812 or 5237630 or 5146527 or 5007705
or 5367589 or 5469520).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

Init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
PH	1	6115122	2000-09-05	Bao			
↑	2	6044189	2000-03-28	Miller			
	3	5896193	1999-04-20	Colbourne			
	4	5892582	1999-04-06	Bao			
	5	5838437	1998-11-17	Miller			
	6	5591965	1997-07-01	Udd			
	7	5563973	1996-10-08	Miller			
	8	5513913	1996-05-07	Ball			
	9	5509093	1996-04-16	Miller			
✓	10	5426297	1995-06-20	Dunphy			
PH	11	5425039	1995-06-13	Hsu			

APP_ID=10686934

Page 1 of 3

PH	12	5422970	1995-06-06	Miller
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	17	5375181	1994-12-20	Miller
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	21	4996419	1991-02-26	Morey
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	45	6137812	2000-10-24	Hsu
✓	46	5237630	1993-08-17	Hogg
PH	47	5146527	1992-09-08	Mallinson

PH	48	5007705	1991-04-16	Morey
PH	49	5367589	1994-11-22	MacDonald
PH	50	5469520	1995-11-21	Morey

Signature

Examiner Name	Date
Phan Palmer	11/26/2004



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APP_ID=10686934

Page 1 of 3

PH	12	4680767	1987-07-14	Hakimi
✓	13	5208886	1993-05-04	Clayton
	14	4545644	1985-10-08	DeVeau, Jr.
	15	4358851	1982-11-09	Scifres
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	45	5914978	1999-06-22	Welch
	46	5946438	1999-08-01	Minot
PH	47	5878065	1999-03-02	Delavaux

Signature

Examiner Name	Date
<i>Phan Palmer</i>	<i>11/26/04</i>



Sheet 1 of 10

Form PTO-449 (Rev. 10-2003)		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2874

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ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828 2874

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↑	0 437 963 A2	07/24/91	EP	G01J 3/26		
	0 721 121 A1	07/10/96	EP	G02B 6/293	B02B 6/34	Abstract only
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EXAMINER Phan Palmer DATE CONSIDERED 11/26/2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

12/20/89

Form PTO-1449		
ATTY DOCKET NO.: 113-02	SERIAL NO.: 10/686,934	FILING DATE: October 15, 2003
APPLICANT: Bao et al.		GROUP: 2828 2874

U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
PH	5,007,705	04/16/91	Morey et al.	350	96.29	
↑	5,042,898	08/27/91	Morey et al.	385	37	
	5,367,589	11/22/94	MacDonald et al.	385	37	
	5,469,520	11/21/95	Morey et al.	385	37	
	5,602,949	02/11/97	Epworth	385	37	
	5,694,503	12/02/97	Fleming et al.	385	37	
	5,841,920	11/24/98	Lemaire et al.	385	37	
	5,892,582	04/06/99	Bao et al.	356	345	
	5,978,539	11/02/99	Davies et al.	385	129	
	5,991,483	11/23/99	Engelberth	385	37	
	5,999,671	12/07/99	Jin et al.	385	37	
	6,044,189	03/28/00	Miller	385	37	
	6,115,122	09/05/00	Bao et al.	356	345	
	6,181,851	01/30/01	Pan et al.	385	37	
	6,229,827	05/08/01	Fernald et al.	372	112	
↓	6,240,220	05/29/01	Pan et al.	385	13	
PH	6,327,036	12/04/01	Bao et al.	356	480	

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation Yes/No
PH	WO 98/17968	04/30/98				
↑	WO 98/27446	06/25/98				
↓	WO 00/07047	02/10/00				
PH	WO 00/39617	07/06/00				

OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

PH		Ball and Morey (Dec. 1994), "Compression-tuned single-frequency Bragg grating fiber laser," Opt. Lett. 19(23): 1979-1981.
↑		Hill and Meltz (Aug. 1997), "Fiber Bragg grating technology fundamentals and overview," J. Lightwave Technology 15(8): 1263-1276.
↓		Iocco et al. (Sept. 1998), "Tension and compression tuned Bragg grating filter," Proc. ECOC '98, vol.1: 229-230.
PH		Iocco et al. (July 1999), "Bragg grating fast tunable filter for wavelength division multiplexing," J. Lightwave Technology 17(7): 1217-1221.

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PH	4,806,012	02/21/89	Meltz et al.	356	32	
↑	4,848,999	07/18/89	Taylor	65	4.3	
	4,892,388	01/09/90	Taylor	350	320	
	4,923,273	05/08/90	Taylor	350	96.21	
	4,996,419	02/26/91	Morcy	250	227.18	
	5,062,684	11/05/91	Clayton et al.	385	27	
	5,073,004	12/17/91	Clayton et al.	385	27	
	5,212,745	05/18/93	Miller	385	25	
	5,212,746	05/18/93	Miller et al.	385	25	
	5,227,857	07/13/93	Kersey	356	345	
	5,289,552	02/22/94	Miller et al.	385	73	
	5,361,130	11/01/94	Kersey et al.	356	345	
	5,375,181	12/20/94	Miller et al.	385	27	
	5,380,995	01/10/95	Udd et al.	250	227.18	
	5,397,891	03/14/95	Udd et al.	250	227.18	
	5,410,404	04/25/95	Kersey et al.	356	345	
	5,401,956	03/28/95	Dunphy et al.	250	227.18	
	5,422,970	06/06/95	Miller et al.	385	72	
	5,426,297	06/20/95	Dunphy et al.	250	227.23	
	5,509,093	04/16/96	Miller et al.	385	27	
	5,513,913	05/07/96	Ball et al.	374	120	
↓	5,563,973	10/08/96	Miller et al.	385	81	
PH	5,591,965	01/07/97	Udd	250	227.18	

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PH			Boucher, R. et al. (1992), "Calibrated Fabry-Perot Etalon as an Absolute Frequency Reference for OFDM Communications," IEEE Photon. Tech. Lett. 4(7):801-803
			Davis, M.A. and Kersey, A.D. (1995), "Matched-filter interrogation technique for fibre Bragg grating arrays," Electron. Lett. 31(10):822-823
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			Dunphy, J. et al. (1993), "Instrumentation development in support of fiber grating sensor arrays," Proc. of the SPIE V: 2071, pp. 2-11
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			Glance, B.S. et al. (1988), "Densely Spaced FDM Coherent Star Network With Optical Signals Confined to Equally Spaced Frequencies," J. Lightwave Technol. 6(11):1770-1781
			Jackson, D.A. et al. (1993), "Simple multiplexing scheme for a fiber-optic grating sensor network" Opt. Lett. 18(14):1192-1194
			Jackson, D.A. et al. (1993), "Pseudoheterodyne Detection Scheme for Optical Interferometers" Electron. Lett. 13(25):1081-1083
			Kersey, A.D. et al., "Development of Fiber Sensors for Structural Monitoring," SPIE 2456:262-268
PH			Kersey, A.D. et al. (1993), "Multiplexed fiber Bragg grating strain-sensor system with a fiber Fabry-Perot wavelength filter," Opt. Lett. 18(16):1370-1372

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PH ↑		Kersey, A.D. "Interrogation and Multiplexing Techniques for Fiber Bragg Grating Strain-Sensors," Optical Sciences Division Naval Research Laboratory (NRL) code 5674, distributed by NRL at SPIE Meeting Fall 1996, Denver, CO
		Kersey, A.D. et al. (1992), "High-Resolution Fibre-Grating Based Strain Sensor With Interferometric Wavelength-Shift Detection" Electron. Lett. 28(3):236-238
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		Rao, Y.-j. and Jackson, D.A. (1996), "Universal Fiber-Optic Point Sensor System for Quasi-Static Absolute Measurements of Multiparameters Exploiting Low Coherence Interrogation," J. Lightwave Technol. 14(4):592-600
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PH ↓		Xu, M.-G. et al. (1993), "Novel frequency-agile interrogating system for fibre Bragg grating sensor," Proc. of the SPIE V. 2071, pp. 59-65

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Title of Invention	Waferless fiber fabry-perot filters																																																																																																																						
<p>Application Number: 10/686934</p> <p>Confirmation Number: 4564</p> <p>First Named Applicant: Yufei Bao</p> <p>Attorney Docket Number: 113-02</p> <p>Search string: (5703978 or 5721802 or 6529661 or 6671432 or 5381500 or 5159655 or 5179608 or 5650856 or 5050949 or 6263002 or 6449047 or 6504616 or 20030076505).pn.</p> <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>PH</td><td>1</td><td>5703978</td><td>1997-12-30</td><td>DiGiovanni</td><td></td><td></td><td></td></tr><tr><td>↑</td><td>2</td><td>5721802</td><td>1998-02-24</td><td>Francis</td><td></td><td></td><td></td></tr><tr><td></td><td>3</td><td>6529661</td><td>2003-03-04</td><td>Kropp</td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td>6671432</td><td>2003-12-30</td><td>Imada</td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td>5381500</td><td>1995-01-10</td><td>Edwards</td><td></td><td></td><td></td></tr><tr><td></td><td>6</td><td>5159655</td><td>1992-10-27</td><td>Ziebol</td><td></td><td></td><td></td></tr><tr><td></td><td>7</td><td>5179608</td><td>1993-01-12</td><td>Ziebol</td><td></td><td></td><td></td></tr><tr><td></td><td>8</td><td>5650856</td><td>1997-07-22</td><td>Morse</td><td></td><td></td><td></td></tr><tr><td></td><td>9</td><td>5050949</td><td>1991-09-24</td><td>DiGiovanni</td><td></td><td></td><td></td></tr><tr><td></td><td>10</td><td>6263002</td><td>2001-07-17</td><td>Hsu</td><td></td><td></td><td></td></tr><tr><td>✓</td><td>11</td><td>6449047</td><td>2002-09-10</td><td>Bao</td><td></td><td></td><td></td></tr><tr><td>PH</td><td>12</td><td>6504616</td><td>2003-01-07</td><td>Haber</td><td></td><td></td><td></td></tr></tbody></table> <p>US Published Applications</p> <p>Note: Applicant is not required to submit a paper copy of cited US Published Applications</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Pub. No.</th><th>Date</th><th>Applicant</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody></tbody></table>								init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	PH	1	5703978	1997-12-30	DiGiovanni				↑	2	5721802	1998-02-24	Francis					3	6529661	2003-03-04	Kropp					4	6671432	2003-12-30	Imada					5	5381500	1995-01-10	Edwards					6	5159655	1992-10-27	Ziebol					7	5179608	1993-01-12	Ziebol					8	5650856	1997-07-22	Morse					9	5050949	1991-09-24	DiGiovanni					10	6263002	2001-07-17	Hsu				✓	11	6449047	2002-09-10	Bao				PH	12	6504616	2003-01-07	Haber				init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
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Page 1 of 2

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